

01MRA0170; 60.130-1034

AMENDMENT

IN THE CLAIMS:

1. (CURRENTLY AMENDED) A vehicle suspension system comprising:
- a stabilizer bar including at least one bar damper, and said stabilizer bar is connectable disc connected to a vehicle wheel; and
 - a clutch device substantially housing said at least one bar damper disc and including at least one clutch damper that is connectable disc to be connected to a vehicle frame, one of said at least one bar damper disc and said at least one clutch damper disc substantially interacting movable relative to each other to control a level of stiffness of said stabilizer bar.
2. (CURRENTLY AMENDED) The stabilizer bar as recited in claim 1 wherein a friction material is substantially coated on at least one of said clutch and said bar dampers discs.
3. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 2 wherein increased contact of each of said clutch and said bar dampers discs with said friction material substantially increases said level of stiffness of said stabilizer bar.
4. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 2 wherein said clutch and said bar dampers discs and said friction material are substantially enclosed by at least a pair of outer walls flexibly secured to a body of said clutch device and to said stabilizer bar.
5. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 4 wherein a load applied on said outer walls presses said outer walls towards said clutch and said bar dampers discs such that said friction material substantially contacts said clutch and said bar dampers discs.

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6. (ORIGINAL) The vehicle suspension system as recited in claim 5 wherein a fluid is dispersed in said clutch body.
7. (ORIGINAL) The vehicle suspension system as recited in claim 5 wherein a sensor monitors at least one ride parameter and generates a signal based on said at least one ride parameter, said sensor applying said load on said outer walls corresponding to said signal.
8. (ORIGINAL) The vehicle suspension system as recited in claim 5 wherein said load is applied by a fluid.
9. (ORIGINAL) The vehicle suspension system as recited in claim 5 wherein said load is applied from electrical power.
10. (ORIGINAL) The vehicle suspension system as recited in claim 5 wherein said load is applied from an electro-rheological fluid reactive to a signal generated by a sensor.
11. (ORIGINAL) The vehicle suspension system as recited in claim 5 wherein said load is applied from a magnetic-rheological fluid reactive to a signal generated by a sensor.
12. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 1 wherein there are a plurality of said at least one clutch ~~damper disc~~ and said at least one bar ~~damper disc~~, said plurality of ~~clutch or bar dampers discs~~ substantially alternating.
13. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 2 ~~+~~ wherein said ~~clutch or bar dampers discs~~ and said friction materials are substantially perpendicular to a longitudinal axis of said stabilizer bar.

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14. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 1 wherein said stabilizer bar includes a division which splits said stabilizer bar into substantially equal portions ~~split to form a division~~, said clutch device housing said division.

15. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 1 further including a pair of inner walls flexibly secured to said body of said clutch device and to said stabilizer bar, one of said outer walls and one of inner walls forming a first compartment and the other of said inner walls and the other of said outer walls forming a second compartment, each of said ~~clutch and bar dampers discs~~ being enclosed in one of said compartments, a load applied on said walls presses said inner walls outwardly and said outer walls inwardly such said ~~clutch and bar dampers discs~~ substantially contact.

16. (CURRENTLY AMENDED) A vehicle suspension system comprising:

a stabilizer bar including at least one bar ~~damper~~, and said stabilizer bar is connectable disc connected to a vehicle wheel;

a clutch device including a clutch body, at least one clutch ~~damper~~ that is connectable disc connected to a vehicle frame, a pair of inner walls and a pair of outer walls both flexibly connected to said clutch body and said stabilizer bar, one of said outer walls and one of inner walls forming a first compartment and the other of said inner walls and the other of said outer walls forming a second compartment, a fluid and said ~~clutch and said bar dampers discs~~ being enclosed in said compartments, said at least one bar ~~damper disc~~ and said at least one clutch ~~damper disc~~ substantially alternating and interacting to control a level of stiffness of said stabilizer bar; and

a sensor which monitors at least one ride parameter and generates a signal based on said at least one ride parameter, said sensor applying a load pressing said inner walls outwardly and said outer walls inwardly such that said ~~clutch and said bar dampers discs~~ substantially contact.

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17. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 16 wherein increased contact of each of said ~~clutch and said bar dampers discs~~ with a friction material substantially increases said level of stiffness of said stabilizer bar.

18. (ORIGINAL) The vehicle suspension system as recited in claim 16 wherein said stabilizer bar includes a division which splits said stabilizer bar into substantially equal portions ~~split to form a division~~, said clutch device housing said division.

19. (CURRENTLY AMENDED) The vehicle suspension system as recited in claim 16 wherein each of said ~~clutch and said bar dampers discs~~ is enclosed in one of said compartments.

20. (CURRENTLY AMENDED) The method for controlling a level of stiffness of a stabilizer bar of a vehicle suspension system comprising the steps of:

sensing at least one ride parameter;

generating a signal based on said at least one ride parameter;

applying a load corresponding to said signal on a pair of inner walls and a pair of outer walls both flexibly connected to a clutch body of a clutch device and said stabilizer bar, one of said outer walls and one of inner walls forming a first compartment and the other of said inner walls and the other of said outer walls forming a second compartment; and

interacting at least one bar ~~damper disc~~ attached to said stabilizer bar and at least one clutch ~~damper disc~~ attached to said clutch device, both said ~~at least one bar damper discs~~ and said ~~at least one clutch damper discs~~ being located in one of said compartments, by said load to control said level of stiffness of said stabilizer bar.

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21. (NEW) A vehicle comprising:

a stabilizer bar including at least one bar damper, and said stabilizer bar is connected to a vehicle wheel; and

a clutch device substantially housing said at least one bar damper and including at least one clutch damper connected to a vehicle frame, at least one of said at least one bar damper and said at least one clutch damper moving to control a level of stiffness of said stabilizer bar.